

## Intel-configuration 4f-5d transitions of the Ce<sup>3+</sup> ion in a LiLuF<sub>4</sub> crystal<sup>1</sup>

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### Abstract

The 4f-5d absorption spectra of Ce<sup>3+</sup> ions in a LiLuF<sub>4</sub> single crystal are interpreted. A set of crystal-field parameters for the 5d electron is suggested, and the values of the g-factors in the ground state and relative intensities of the 4f-5d transitions are calculated. Good agreement is obtained between the results of calculations and experimental data.

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